

DEPARTMENT OF TRANSPORTATION**DIVISION OF ENGINEERING SERVICES**

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch
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Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 1.28**WELDING INSPECTION REPORT****Resident Engineer:** Pursell, Gary**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-016385**Date Inspected:** 21-Aug-2010**Project Name:** SAS Superstructure**OSM Arrival Time:** 630**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1500**Contractor:** American Bridge/Fluor Enterprises, a JV**Location:** Jobsite**CWI Name:** See below**CWI Present:** Yes No**Inspected CWI report:** Yes No N/A**Rod Oven in Use:** Yes No N/A**Electrode to specification:** Yes No N/A**Weld Procedures Followed:** Yes No N/A**Qualified Welders:** Yes No N/A**Verified Joint Fit-up:** Yes No N/A**Approved Drawings:** Yes No N/A**Approved WPS:** Yes No N/A**Delayed / Cancelled:** Yes No N/A**Bridge No:** 34-0006**Component:** SAS OBG**Summary of Items Observed:**

On this date CALTRANS OSM Quality Assurance Inspector (QAI) Bert Madison was present at Yerba Buena Island in California between the times noted above for observations relative to the work being performed by American Bridge/Fluor Enterprises (AB/F) personnel at the locations noted below.

- 1). PP13 ABF-SUB-001503R00 (Westbound)
- 2). OBG Field Splice 5W/6W Weld ID: C2, Face A
- 3). OBG Field Splice 2E/3E Weld ID: A LS6
- 4). OBG Field Splice 5E/6E Weld ID: C1 & C2, Face B

The QAI periodically observed the QA Verification status board located in the QC Conex and no QA verification became available on this date during the QA Inspector's shift.

- 1). PP13 ABF-SUB-001503R00 (Westbound)

The QAI periodically observed AB/F approved welder Fred Kaddu (ID 2188) performing welding per the Shielded Metal Arc Welding (SMAW) process to install the patch in the full height shear plate at PP13. See photo below.

The QAI observed QC Inspector Mike Johnson was present periodically to monitor the progress and verify that the welding parameters were within the limits established by the approved Welding Procedure Specifications (WPS) identified as ABF-WPS-D1.5-1090 (horizontal) and ABF-WPS-D1.5-1010-1 (vertical). The welding at this location was completed from the outside of the patch plate upon the arrival of the QAI. See photo below. Mr. Kaddu was observed completing the fillet welding of the patch plate to the bottom plate (bottom flange) from the inside and then performing air carbon arc gouging of the vertical and horizontal seams on the inside. Later in the shift Mr. Kaddu began back welding the vertical seam from the inside. Welding was in process for the duration of

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the QA Inspector's shift and appeared to be in general compliance with contract documents.

2). OBG Field Splice 5W/6W Weld ID: C2, Face A

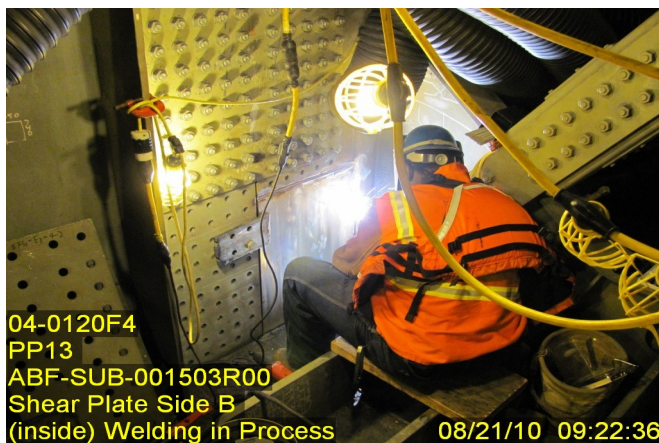
The QAI periodically observed AB/F approved welder Hua Qiang Hwang (2930) performing welding per the Flux Cored Arc Welding (FCAW-G) process in the 3G (vertical) position of root, fill and cover passes on the last 600mm of weld ID: C2. The QAI observed QC Inspector Mike Johnson was present periodically to monitor the progress and verify that the welding parameters were within the limits established by the approved Welding Procedure Specification (WPS) identified as ABF-WPS-D1.5-3042B-1. The QAI observed that the work at this location was in process and appeared to be in general compliance with contract documents.

3). OBG Field Splice 2E/3E Weld ID: A LS6

The QAI periodically observed AB/F welding personnel James Zhen (ID 6001) performing grinding of the B face of Weld ID: A LS6 to prepare for back welding. The QAI observed QC Inspector Tom Pasqualone performing Magnetic Particle Testing (MT) of the groove prior to back welding. The QAI observed that the performance and evaluation of the MT appeared to comply with the MT procedure identified as SE-MT-CT-D1.5-101 Rev. 4. The QAI then periodically observed the in process back welding of Face B of the A LS6 Field Splice per the (SMAW) process in the 3G (vertical) position. QC Inspector John Paglieri was present to monitor the progress and verify that the welding parameters were within the limits established by the approved welding Procedure Specification (WPS) identified as ABF-WPS-D1.5-1012-3. The QAI did not observe the completion of welding at this location but observed that the work at this location appeared to be in general compliance with contract documents.

4). OBG Field Splice 5E/6E Weld ID: C1 & C2, Face B

The QAI periodically observed SE QC Inspector Steve McConnel performing Ultrasonic Testing (UT) from the B Face of OBG Field Splice 5E/6E Weld ID: C1 & C2. Mr. McConnel utilized the UT Procedure identified as SE-UT-D1.5-CT-100 Rev.4 during the examination of the splice weld. The QC technician performed the required longitudinal wave utilizing a 1" diameter transducer for base metal soundness and a .63 x .75 rectangular transducer to perform the shear wave testing during the testing for weld soundness. The UT examination was completed during this shift. At the conclusion of the QC testing the QAI observed that the QC technician noted two (2) rejectable flaws which were marked on the B-face of the groove weld.



Summary of Conversations:

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Conversations on this date with Quality Control Inspectors were general in nature and pertained to locations of welding and QC activities.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Mohammed Fatemi (916) 813 3677, who represents the Office of Structural Materials for your project.

Inspected By:	Madison,Bert	Quality Assurance Inspector
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Reviewed By:	Levell,Bill	QA Reviewer
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